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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,012	09/10/2002	Lawrence E. Thieben	IN-5596	5726

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EXAMINER	
FEELY, MICHAEL J	

ART UNIT	PAPER NUMBER
1712	

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/065,012	THIEBEN, LAWRENCE E.	
	Examiner	Art Unit	
	Michael J. Feely	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 13-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 13-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Pending Claims

Claims 1-11 and 13-21 are pending.

Specification

1. The objection to the disclosure has been overcome by amendment.

Weight of the Preamble Language

2. In claims 1-11, the recitation *"for automotive refinish applications cured at temperatures above 32°F and below 120°F,"* has been given little patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In the instant case, the preamble merely recites the intended use of the coating composition, wherein the prior art can meet this future limitation by merely being capable of such intended use.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The rejection of claims 1-11 and 13-21 under 35 U.S.C. 103(a) as being unpatentable over Osterhold et al. (US Pat. No. 5,906,864) has been overcome by amendment.

5. Claims 1-6, 9-11, and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnsen et al. (Pub. No.: US 2002/0054957).

Regarding claims 1, 2, 13, and 14, Johnsen et al. disclose: ***(1)*** a coating composition comprising a solvent-borne coating (Abstract; paragraph 0040); and ***(13)*** a method of forming a coating composition (Abstract; paragraph 0053), said composition comprising:

(a) a film-forming polymer comprising an epoxide polymer having an equivalent weight between 170-900 (paragraphs 0033, 0096, 0121; *see also product data sheet for Epikote 235*);

(b) a mixture of crosslinking agents selected from a list of crosslinkers including a polyamide functional compound and a phenalkamine compound (paragraph 0033);

(c) one or more pigments (paragraph 0038); and

(d) solvent present in an amount between 27 and 46% by weight (paragraphs 0040 and 0045 – *inherent overlap of ranges*), where weights are passed on total coating composition weight; and

(2 & 14) wherein the epoxide polymer comprises an epoxy-terminated polyglycidyl ether of bisphenol A (paragraphs 0033, 0096, 0121; *see also product data sheet for Epikote 235*).

Johnsen et al. do not explicitly disclose, *"a mixture of crosslinking agents wherein at least one crosslinking agent is a polyamide functional compound and at least one crosslinking agent is a phenalkamine compound;"* rather, they disclose, "Suitable curatives may comprise ***one or more*** of the following: an amine or amino functional polymer selected from the general classes of aliphatic amines and polyamines, ***polyamides***, amidoamides, amidoamines,

polyoxyalkylene amines, modified aryl-aliphatic amines, cycloaliphatic amines and polyamines, aromatic amines, Mannich bases, ***phenalkamines***, amino functional silicones or silanes including epoxy adducts and ketimines thereof," (paragraph 0033).

The list of materials provided by Johnsen et al. to form a blend is relatively small. Hence, it would be reasonable to expect that one skilled in the art would have chosen a blend of a phenalkamine and polyamide as an amine hardener blend in their coating composition.

Further regarding the mixture of crosslinking agents, Johnsen et al. do not explicitly disclose "at least 2% by weight" of the polyamide functional compound. However, a blend is generally provided in a 50:50 ratio. Evidence of this can be found in *paragraph 0119*, wherein a 50:50 blend of curing agents is used. In light of this analogous example, one of ordinary skill in the art would have been motivated to use this blending ratio in any of the obvious combinations set forth in *paragraph 0033*.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a mixture of a phenalkamine and (at least 2% by weight) of polyamide in the composition of Johnsen et al. because Johnsen et al. disclose an amine hardener blend of phenalkamine and polyamide in their coating composition, along with an analogous example that uses a 50:50 blend of curing agents.

The teachings of Johnsen et al. do not explicitly disclose that the pigments are "stabilized in dispersion by the phenalkamine compound." It has been found that "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d

705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). In light of this, it appears that the obvious embodiment of Johnsen et al., featuring a combination of a phenalkamine and polyamide, would have inherently provided a stabilization effect on the pigment in the coating composition.

Finally, Johnsen et al. do not explicitly disclose that their composition is *"for automotive refinish applications cured at temperatures above 32°F and below 120°F."* However, the preamble merely recites the intended use of the coating composition, and the prior art satisfies this future limitation merely because it is capable of this intended use.

Regarding claims 3-6, 9, 15-18, and 21, the claim limitations provide specific quantities of phenalkamine and polyamide functional compound based on the total crosslinker weight. The following is a summary of these limitations:

Claim Number	***Phenalkamine %***	***Polyamide Functional Compound %***
Claims 3 & 15	2% to 98%	2% to 98%
Claims 4 & 16	40% to 98%	2% to 60%
Claims 5 & 17	50% to 98%	2% to 50%
Claims 6 & 18	40% to 60%	40% to 60%
Claims 9 & 21	40% to 98%	2% to 60%

As discussed above, a blend is generally provided in a 50:50 ratio. Evidence of this can be found in *paragraph 0119*, wherein a 50:50 blend of curing agents is used. In light of this analogous example, one of ordinary skill in the art would have been motivated to use this blending ratio in any of the obvious combinations set forth in *paragraph 0033*.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the ratios of a phenalkamine to polyamide, as set forth in claims 3-6, 9, 15-18, and 21, in the composition of Johnsen et al. because Johnsen et al. disclose an amine hardener blend of phenalkamine and polyamide in their coating composition, along with an analogous

example that uses a 50:50 blend of curing agents. Such a 50:50 blend would have satisfied all of the ranges set forth in claims 3-6, 9, 15-18, and 21.

Regarding claim 10, Johnsen et al. are silent regarding *"the presence of pigment being in the range of 32% to 52% by weight, based on the total solids weight of the coating composition;"* however, it should be noted that Applicant fails to show criticality for this range *(see paragraphs [0014] to [0015] of the Specification)*. Rather, Applicant merely discusses a preferable range. Furthermore, one skilled in the art would have recognized that pigment quantity is a result effective variable that dictates adequate coloring properties and processabilty of the coating composition – *see MPEP 2144.02 II.*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the quantity of pigment in the composition of Johnsen et al. because the pigment quantity is a result effective variable that dictates adequate coloring properties and processabilty of the coating composition.

Regarding claim 11, Johnsen et al. are silent regarding the intended use limitation of, *"wherein the coating is cured at ambient temperatures."* It has been found that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA

1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). It appears that the composition of Johnsen et al. is capable of undergoing curing at ambient conditions; therefore, the limitation is satisfied.

6. Claims 7, 8, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnsen et al. (Pub. No.: US 2002/0054957) in view of Osterhold et al. (US Pat. No. 5,906,864).

Regarding claims 7, 8, and 19-21, Johnsen et al. disclose the use of pigments, such as diketo pyrrolo-pyrol, ferro pigments, fluorescent pigments, metallic pigments and flakes *(see paragraph 0038)*; however, they do not explicitly disclose the use of pigments selected from the group consisting of: ***(7, 19 & 21)*** metal oxide pigments, titanium dioxide, talcum, calcium carbonate, calcium metasilicate, calcium phosphate, calcium molybdate, calcium metaborate, barium sulfate, barium metaborate, zinc phosphate, zinc chromate, zinc nitrophthalate, zinc molybdate, zinc benzoate, aluminum zinc phosphate and aluminum triphosphate and mixtures thereof; and ***(8 & 20)*** zinc oxide pigments, titanium dioxide, iron oxide, talcum, calcium carbonate, calcium metasilicate, barium sulfate, zinc phosphate, zinc chromate, calcium phosphate, barium metaborate and mixtures thereof.

Osterhold et al. disclose an analogous epoxy-based composition featuring a blend of amine hardeners used to provide corrosion protection of metals. Osterhold et al. disclose, "The coating compositions according to the invention may contain conventional pigments and fillers, such as titanium oxide, barium sulphate, aluminum silicate, silicone dioxide, zinc phosphate, carbon black, colour-imparting and/or transparent organic and inorganic pigments, as well as conventional additives conventional in lacquers," (column 8, lines 41-47). The teachings of

Osterhold et al. demonstrate that the pigments set forth in instant claims 7, 8, 19, and 20 are recognized in the art as suitable pigments that fall under the general description of suitable pigments set forth in Johnsen et al.

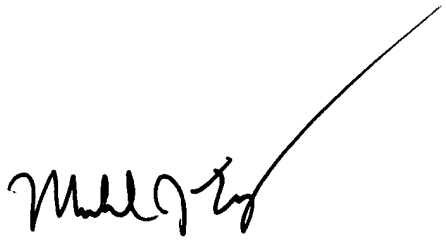
Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use any of the pigments set forth in claims 7, 8, and 19-21, as taught by Osterhold et al., in the composition of Johnsen et al. because Osterhold et al. demonstrate that these pigments are recognized in the art as suitable pigments for epoxy-based coating compositions, resulting in colored coatings used to provide corrosion protection of metals.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael J. Feely
Primary Examiner
Art Unit 1712

July 20, 2005